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# THE EFFECTIVE USE OF WHATSAPP MESSENGER AMONG LIBRARY AND INFORMATION SCIENCE PROFESSIONALS IN NORTH EAST REGION, INDIA: A STUDY

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## Abstract

*Implementation of Information and Communication Technologies (ICTs) has changed the way people access and communicate information. Users want easy and instant access to relevant information, putting pressure on Library and Information Science (LIS) professionals to think out of the box for meeting their information needs. Application of mobile phones to provide library and information services are a significant step in this direction. The vast increase in the use of mobile application among the academic users, most especially WhatsApp, brought about the concept of WhatsApp use in academic libraries, this mobile application enables people to send real- time messages, image, video, audio and location information or group of contacts with internet connection. Using WhatsApp in the library implies: Librarians can easily send free messages to any part of the world without any charges. Librarians can share location, photos, status with their patrons on mobile devices. Library need not spend any money for sharing information with their patrons at the tip of their hands. The purpose of this study is to identify the effective use of WhatsApp messenger usage among Library and Information Science professionals in North East Region in India.*

**Keywords:** WhatsApp, LIS Professional, Mobile application, Libraries, Academic users,

## Introduction

The information culture has become the lifestyle of today's society. Every aspect of life makes use of and uses information. One technology that provides the easiest and fastest way to communicate and share information and reduce the communication gap between two individuals and two communities is mobile technology. Mobile technology offers the ease and speed in utilizing information especially for quick reference and conducting extensive research. Adopting mobile technology in the library will assist in performing better service by communicating with users openly and sharing information and knowledge in an easy way. Mobile technology becomes a means for libraries to communicate better, service and share information and knowledge with library users anytime and anywhere. Mobile technology has switched the libraries and now come up with "Libraries in hand/packet" trend. Library and Information science (LIS) professionals are in move to determine these devices are affecting information access /disseminate and ensure that they are communicating with library users and providing web content in the most appropriate and effective ways. LIS professionals must be prepared to take this challenge to increase the market and demand for mobile access to personalized facts and information anytime, anywhere on ones one's own handheld device. Since mobile handled

devices are truly personal devices, search histories and physical locations can be harnessed to produce more accurate, individualized information and services. LIS professionals are expert for proficient in using these devices to enable users to access them anywhere from anyplace.

### **About WhatsApp Messenger Functionality**

Brian Acton and Jan Koum, both former employees of Yahoo founded WhatsApp Inc. The company is based in Mountain View, California and employs 55 people. In 2014 Facebook acquired and take over the process of WhatsApp Inc. WhatsApp is a mobile application which enables texting service between mobile phones as a replacement for the regular SMS text messages, it is social application which enables users to send and receive real-time messages, images, video, audio and also location information to an individual or group of contacts using the internet connection at no cost. At present, WhatsApp is one of the common mobile applications that handle billions of messages per day; it is available for iPhone, BlackBerry, Android, Windows Phone and Nokia. WhatsApp messenger is a mobile application which requires a mobile internet connection to function and both parties must have the proprietary software installed on their mobile phone. WhatsApp also provides additional social information to its users, e.g., contacts can see when their friends are online, when they are typing and when they last accessed the application. Finally, WhatsApp provides delivery notifications, highlighting when a message is sent and when it's delivered to the recipient's device. The app is available on its website and in the iTunes App Store and Android Marketplace.

### **WhatsApp and Library and Information Centres**

WhatsApp is a Social networks now fills the virtual world, but the survival of any social network and its continuation depends on its unique service which makes it better than other social networking competition through which you can earn a lot of users, such as the existence of the application of the social network on the smart phone and sharing service multimedia such as images, sound clips, videos, and service create different groups that combine multiple users agree on ideas and trends such as the establishment of social groups, political or economic, etc.

The WhatsApp messenger application provides technology enabled Library efforts to activate communication with the different users who use different modern communication means, to meet their immediate needs and desires. WhatsApp application will add new service which will enable users to communicate with the Library and LIS Professional wherever they are and whenever they want to make utilize the Library services; it will also enable to academic users to have a direct contact with the LIS professionals for asking any question and get an answer to it that helps them in performing scientific researches or doing the special works related to the syllabus. It also enables the Library to define its services and subscriptions in databases and periodicals.

Apart from that WhatsApp application for library services, selective dissemination that aims at keeping users up to date with the scientific developments/ current awareness (CAS) in their specialization; where the definition of academic users' attributions according to their specializations and research interests, with the aim of informing them the new vessels for each in his/her field. This service also includes informing them with conferences/symposia/news/alert service held all over the world and file sharing tool.

## **Review of Literature**

Niranjana and Chanda (2018) conducted a study WhatsApp as a means of Sharing information among LIS professional and found People mostly use instant messenger app for communication, in that case, it will be very effective if the library uses instant messenger app like WhatsApp for delivering information, and it would be a great opportunity for the library to implement WhatsApp to reach end users of the library for better service satisfaction. On the other hand, WhatsApp may also act as a tool for disseminating knowledgeable information among library and information professionals of North-East states of India.

Ansari and Tripathi (2017) studied, entitled Use of WhatsApp for Effective Delivery of Library and Information Services. In that paper the researcher tries to examine the librarians and the users' attitude towards getting WhatsApp as a tool for providing library information services and suggested Libraries can use WhatsApp for delivering library services. Findings indicated that respondents showed a positive attitude toward getting services over WhatsApp. Most of the respondents believe that the use of WhatsApp can improve alert services (CAS, virtual reference, notifications) and libraries can utilize.

Dhokani et.al (2017) found in their study of the use of Library 2.0 and Mobile messaging application in Islamic Azad University and the findings indicated that librarians and library users were more familiar with Web 2.0 applications than Librarian 2.0 and Library 2.0. The frequency of librarians and users' responsiveness to use the mobile messenger applications was quite high, respectively, 0.35 and 0.40. In both groups, the use of mobile messaging applications was moderate. Library users also agreed on providing a variety of virtual social media services in the library.

Achala Munigal (2017), Ansari (2016), Sankar and Kavitha (2016) in their papers clearly indicated Mobile Instant Messaging (MIM) applications made them connected with each other. These applications are also useful for information generation, information gathering and information dissemination in a timely and cost effective manner. So, libraries have to make an effort to provide their services through mobile phones. WhatsApp is an MIM application which makes people connected in real time. It has no additional cost to message and data exchange among mobile devices. And those papers also deal with the use and application of WhatsApp in the libraries, their benefits, usage and impact on library services.

Yeboah and Ewur (2014) conducted a study to identify the impact of social network (WhatsApp messenger) on the performance of tertiary students in Ghana. The study reveals that 48% of respondents spends over 8 hours every day engaged in using WhatsApp on their mobile phone followed by 4 % spent 1-2 hours, 17% spent 3-5 hours per day, 31% spent 6-7 hours. The findings of the study reveal that the majority of respondents, 76% percent said the use of WhatsApp has more negative effects on their studies followed by only 24% of respondents said it has a positive impact on their studies. It is found from the study most of the students wasted much of their precious on Whatsapp chatting with friends.

Army (2014) carried out a study to explore the effect of using WhatsApp mobile learning activities on the achievements and approaches of online students by using mobile devices at the university. It was found from the study mobile learning based WhatsApp social networking has a high positive impact on the achievement test of students. In this study suggests that WhatsApp instant messaging makes learning easy, favor problem solving and resolves learning difficulties related to the learning process or to learning content distributed through WhatsApp, knowledge sharing, etc.

## **Methodology**

The research respondents of this study were recruited from Academic libraries in the 41 Institutions which was located in North East Region (Assam, Arunachal Pradesh, Agartala, Aizal, Meghalaya, Nagaland, Sikkim and Manipur) India. There were 203 library and information science professional staffs are found in these Institutions. After obtaining Two hundred and three academic librarians' names and e-mail addresses from Institute Web sites, purposive sampling was used to recruit the respondents. Selected respondents were invited to complete an online survey through Google forms. The purpose of this study, Two hundred and three librarians were sent a survey by an introductory e-mail to complete and return within fifteen days. In order to obtain more responses, they were also sent reminder e-mails. All participation was strictly voluntary. The number of Library and Information Science Professional (LIS) who completed and returned surveys was 171 (84.24%). Out of 171, 109 (64%) respondents are male and 62 (36%) respondents are female.

## **Objective of the Study**

- ✚ To identify the purpose of using WhatsApp in Libraries.
- ✚ To determine what are the services possible to serve via WhatsApp.
- ✚ To examine the Preferable Way of providing reply for the users' queries.
- ✚ To analyze the facts using Web WhatsApp for reply to the Queries.
- ✚ To know the reasons why LIS professionals should use WhatsApp in the Library.
- ✚ To identify the LIS professional experience using various WhatsApp functions.
- ✚ To know the Time is taken by LIS professional reply to use's queries.

## DATA ANALYSIS AND INTERPRETATION

### The Purpose of using WhatsApp

S.N	Purpose	Responses	Percentage
1	Response the User queries about Library/Resources	171	100
2	Share the audio/video tutorials about Library/resources	143	84
3	Inform the New subscriptions/arrivals	171	100
4	Request the use of Trail access of e resources	126	74
5	Share the Institute/Library Event photos & short videos	109	64
6	Disseminate the Library website/Social Media/Library Map/OPAC link.. etc	155	91
7	Real Time Communication between Library and Users	171	100
8	Use the Group Chat feature to create Library User Group	125	73
9	Other purpose	52	31

**Table 1. Purpose of using WhatsApp**

Above Table 1 represents an attempt was made to estimate the purpose of using WhatsApp use by the respondents. The majority of the library professionals has responded in different ways Majority of respondents, 100% of the LIS profession using for response to the user queries and real time communication between library users. Followed by Disseminate the Library website/Social Media/Library Map/OPAC link.. 91% Share the audio/video tutorials about Library/resources 84% Request the use of Trail access of e resources 74% Use the Group Chat feature to create Library User Group 73% and 64% of the responded for Share the Institute/Library Event photos & short videos only 31% of the respondent's response for other purpose.

### What are services possible to serve via WhatsApp?

S.N	Services	Responses	Percentage
1	Current Awareness Service (CAS)	152	89
2	Selective Dissemination of Information (SDI)	131	77
3	Reference service:	154	90
4	Ask Librarian:	171	100
6	User Discussion Forum:	171	100
7	Document Reservation:	99	58
8	Abstract Service:	54	32
9	Library instruction:	129	75
10	Acquisition Feedback:	114	67
11	Reminders and notifications Library News:	171	100
12	E-book searching & Mobile collections links	142	83
13	Reprography Service:	--	--

**Table 2. Possible Services to serve via WhatsApp**

The result is shown in Table 2 about what are the services to serve via WhatsApp platform, Ask a librarian, User discussion forum, reminders and notifications library news services are 100% response from the LIS professionals. Followed by Reference service 90%, E-book searching & Mobile collections links 83%, current awareness service 89%, SDI 77%, library instruction 75% and only 32% of the respondents are responses for possible for Abstract service. No one opts the option for Reprography service.

**To examine the Preferable Way of providing a reply for user's queries.**

Si	Way of Response	Responses	Percentage
1	Simply Text (short Messages)	171	100
2	Links	120	70
3	Documents (Pdf/Word)	98	57
4	Emoji/Gif/Stickers	21	12
5	Images/Photos/Videos	79	46
6	Audio call/Video Call	56	33

**Table 3. Preferable Way of providing a reply for users queries**

This study also examines the preferable way of providing a reply for user's queries by Library and Information science professionals. Table 3 shows that 100% of the LIS professionals using the way to reply simply text (short Messages). 70% of the respondents are simply provide via links, 57% presents agreed with documents it may be pdf or word format, 46% of the response received for Images/photos/videos. And only 33% of the respondents used the way to reply to users' queries. In questionnaire had marked below the question by the researcher all the replies depend on the user queries.

**Facts about using Web WhatsApp**

S.N	Factors Pros and Cons	Responses	Percentage
1	Type really fast using keyboard as compared to the mobile phone touch screen (Pro)	171	100
2	Directly download the files to PC that you received in Your WhatsApp from Your user (Pro)	171	100
3	Remotely logout from any browser (Pro)	171	100
4	In order to use WhatsApp Web, User has to keep mobile Phone connected to Internet all the time while use the web client (Con)	171	100

**Table 4. Facts about using Web WhatsApp**

The question rose to the LIS professional facts of using web WhatsApp in the library, three pros and one cons are formed by the researcher. Remarkable responses received in this

study by the LIS professionals 100% accepted those three pros first Type really fast using the keyboard as compared to the mobile phone touch screen, second Directly download the files to PC that you received in your Whatsapp from your users, third Remotely logout from any browser and also 100% agree for the on cons of In order to use WhatsApp Web, the user has to keep mobile phone connected to the Internet all the time while use the web client.

#### Various experiences using WhatsApp functions/features

S.N	WhatsApp Functions & Features	Responses	Percentage
1	Group Video and Voice Calls	16	9
2	Catch Up on Group Chats (And More)	48	28
3	Delete Messages to “Unsend” Mistakes	97	57
4	Check Which Chats Are Using Up Storage Space	89	52
5	Share Your Live Location	62	36
6	Set a WhatsApp Status	101	59
7	Two-Factor Authentication	84	34
8	Change Numbers and Keep Your WhatsApp Data	10	6
9	Tag Individuals in Group Chats With @ Mentions	156	91
10	Send and Receive GIFs & Snapshot-Style Image Editing	105	61
11	Quote Messages for Clear Replies	171	100
12	Make Text Bold, Italics, and Strikethrough	102	60
13	Control Privacy on WhatsApp	171	100
14	Share Photos From Cloud Drives	109	64
15	Auto-Sorted Links, Docs, and Media	134	78
16	Clear Chat but Keep Starred Messages	171	100
17	Control Download Settings for Data or Wi-Fi	157	92
18	“Star” Messages to Find Them Later	171	100
19	Back Up Chats to Google Drive	171	100
20	Easier Way to Clear or Archive Chats	102	60
21	Mark Chats as Read or Unread	135	79
22	Use Custom Notifications for People and Groups	158	92

**Table 5. Factors about using Web WhatsApp**

Respondents showed a very positive response toward various experience using WhatsApp functions/features. LIS professionals are keen to provide services over WhatsApp because it will save their time and LIS professionals will be connected to Library users. Researcher formulated presently available 22 features and provides multiple options and allowed people to choose more than one option for function/features which can be experienced over WhatsApp. 100% respondents have had the experience of following functions and features those



are Quote Messages for Clear Replies, Control Privacy on WhatsApp, Clear Chat but Keep Starred Messages, “Star” Messages to Find Them Later, Back Up Chats to Google Drive. Followed by 92% Use Custom Notifications for People and Groups, Control Download Settings for Data or Wi-Fi 91% Tag Individuals in Group Chats With @ Mentions. 79% Mark Chats as Read or Unread, 78% Auto-Sorted Links, Docs, and Media, 60% Easier Way to Clear or Archive Chats Only 6% of the LIS professionals have experience Change Numbers and Keep Your WhatsApp Data.

### **Reasons Why Librarians Use WhatsApp in the Library**

<b>S.N</b>	<b>Reason</b>	<b>Responses</b>	<b>Percentage</b>
1	WhatsApp allows free unlimited messaging	171	100
2	WhatsApp can be used directly over the Internet via WhatsApp Web.	159	93
3	WhatsApp can be used on Wi-Fi without a data plan.	97	57
4	Unlike some messaging solutions, WhatsApp can be used to send videos, audio messages, and pictures.	171	100
5	WhatsApp is a cross platform solution.	102	60
6	WhatsApp can be used to reach Library Users via the technology they are most familiar with their phones	171	100
7	WhatsApp can be used to reach students and parents that do not utilize other communication methods, such as landline telephones and email.	89	52
8	WhatsApp is very cost effective	108	63

**Table 6. Reasons Why Librarians Use WhatsApp in the Library**

In this table 6 reveals that all respondents are responses for the reasons are using WhatsApp in the library. Those responses are WhatsApp allows free unlimited messaging, Unlike some messaging solutions, WhatsApp can be used to send videos, audio messages, and pictures, WhatsApp can be used to reach Library Users via the technology they are most familiar with their phones. 93% of LIS professionals are responding for WhatsApp can be used directly over the Internet via WhatsApp Web. Only 52% responses received for the reason of WhatsApp can be used to reach students and parents that do not utilize other communication methods, such as landline telephones and email.

### Time taken to reply to the users' queries

S.N	Timing	Responses	Percentage
1	Within 15 Minutes	126	74
2	<30 Minutes	33	19
3	<1Hr	9	5
4	<2 Hr	3	2
5	Above	0	-
	<b>Total</b>	<b>171</b>	<b>100</b>

**Table 7. Time taken to reply to the user's queries**

WhatsApp is an effective medium for sending/receiving notification alerts from the libraries as well as library users. LIS professionals to easily send notifications about new arrival, availability of books, about due dates and fine charges, etc. In this table 7 shown that how much time taken to reply to the users' queries by the LIS professionals/ libraries. 74% of the respondents are replied within 15 minutes, 19% of the professionals replied within 15to 30 minutes and only 2% of the respondents replied below 2hrs before.

### Common Rules are followed while WhatsApp a Librarian

S.N	Rules as WhatsApp a Librarian	Responses	Percentage
1	Allow only Library and Information Service related Queries	171	100
2	Information Sharing/discussion/suggestion about Library resources	139	81
3	Regional Languages not encouraged ( Allowed Only in English)	138	81
4	Query will be clear and short	171	100
5	Any source/comment/replies are not allowed to forward except institutional Users	164	96
6	Only Academic related information's seminar/conference/workshop related contents can anyone post/forward	106	62
7	Try to avoid asking the queries except Office Timings	171	100

**Table 8. Common Rules are followed while WhatsApp a Librarian**

WhatsApp proved a useful platform for providing library services and users can get their required services and information's on their smart phones via contact to LIS professionals. Nowadays all the academic libraries had created WhatsApp group/forum to interactive for users and Library professionals. In the group or forum users need follow the some rules to avoid unnecessary cuts. In this table shown that rules as WhatsApp Librarian 100% respondents are following the rules of Allow only Library and Information Service related Queries, Query will be

clear and short, Try to avoid asking the queries except Office Timings. 96% of the respondents are responding for Any source/comment/replies are not allowed to forward except institutional Users, 81% of the responses are Information Sharing/discussion/suggestion about Library resources, Regional Languages not encouraged (Allowed Only in English) and only 62% of LIS professional responses for Only Academic related information's seminar/conference/workshop related contents can anyone post/forward.

### **Opinion about WhatsApp a Librarian Service is effecting to service users**

<b>S.N</b>	<b>Opinion</b>	<b>Response</b>	<b>Percentage</b>
1	Positive	166	97
2	Negative	4	2
3	Neutral	1	1
	<b>Total</b>	<b>171</b>	<b>100</b>

**Table 9. Opinion about WhatsApp a Librarian Service is effecting to service users**

Simply in this table shows that North East Region, India academic librarians is fully familiar to handle the WhatsApp a Librarian Service for the libraries. 97% of the respondents are positively feeling WhatsApp a Librarian service is effect service to users, 2% of the responded for negative option and only 1% neutral.

### **LIS professional Satisfaction with the WhatsApp**

<b>S.N</b>	<b>Status</b>	<b>Response</b>	<b>Percentage</b>
1	Highly Satisfied	106	62
2	Satisfied	45	25
3	Neutral	20	13
4	Dissatisfied	-	-
5	Highly Dissatisfied	-	-
	<b>Total</b>	<b>171</b>	<b>100</b>

**Table 10. LIS professional Satisfaction with the WhatsApp**

Finally, this section sought to find out the LIS professional satisfaction with the WhatsApp for them professional service. 62% of the LIS professionals are highly satisfied with WhatsApp for them, professional, 25% of responding for Satisfied and only 13% percentage of the responses are neutral. There is no negative image about WhatsApp among LIS professionals.

### **Major Findings**

This study found that purpose of using WhatsApp among the LIS professionals 100% of the LIS profession using WhatsApp reply to the user queries and real time communication

between library users and also disseminate the Library website/Social Media/Library Map/OPAC link. Considering the service possibilities via WhatsApp to the users Ask a librarian service, User discussion forum, reminders and notification library news services are 100% possible by the LIS professionals. About reply from the LIS professionals to users 100% of the LIS professionals using the way to reply simply text (Short Messages).

This study also revealed that WhatsApp features/function experienced by the LIS professionals 100% respondents have had the experience of following functions and features those are Quote Messages for Clear Replies, Control Privacy on WhatsApp, Clear Chat but Keep Starred Messages, “Star” Messages to Find Them Later, Back Up Chats to Google Drive. All respondents are responses for the reasons are using WhatsApp in the library. Those responses are WhatsApp allows free unlimited messaging, Unlike some messaging solutions, WhatsApp can be used to send videos, audio messages, and pictures, WhatsApp can be used to reach Library Users via the technology they are most familiar with their phones.

About reply to the user queries 74% of the respondents are replied within 15 minutes, All LIS professionals who have participated in this survey those all are following the rules of ‘Allow only Library and Information Service related Queries’, Query will be clear and short and Try to avoid asking the queries except Office Timings. Opinion about WhatsApp effect in the libraries 97% of the respondents are positively feeling WhatsApp a Librarian service is effect service to users and finally 62% of the LIS professionals are Highly satisfied with WhatsApp for them professional life.

### **Suggestion and Conclusion**

This study has shown an overwhelming majority of LIS professionals are engaged in WhatsApp, it has created a very positive impact on the mind of LIS professionals who are using WhatsApp in the libraries. LIS professionals have adopted this technology to share/communicate the information it is almost adopted by all LIS professionals due to its user-friendly platforms. Information technology has changed the routine of library services. In the present age of information, the use of internet based tool is increasing rapidly. The future of the internet depends upon the mobile technologies. It is the golden opportunity for the libraries to implement mobile based services for their users. There are many mobile based tools and techniques through which libraries can provide services to their users. WhatsApp should be used to interact with users, but LIS professionals should take care about privacy, copyright, authority, etc. Fair use of WhatsApp always helps the LIS professionals in delivering better services. The efficiency and effectiveness of the WhatsApp Messenger in library services a great tool used by the LIS professionals in North East Region, India by the success of providing relevant and timely information to library users.

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